REMARKS

In response to the Office Action mailed February 20, 2004, the Applicants respectfully request reconsideration.

As a preliminary matter, Applicants note with appreciation the indication of allowable subject matter in claims 3-6, 9-10, 15-18, 21-22, and 26-27.

The Office Action objected to the Abstract of the Disclosure because the Abstract should be limited to a single paragraph on a separate sheet. The Abstract has been rewritten to overcome this rejection. Withdrawal of this objection is respectfully requested.

Claims 3, 9, and 23 were objected to because of informalities. Each of the noted informalities has been corrected and withdrawal of these objections is respectfully requested.

Claims 12-18, 23-27, and 30-31 were rejected under 35 U.S.C. §112, second paragraph as being indefinite. Specific rejections were set forth concerning antecedent basis for certain terms in claims 12, 23, and 30. Each of these claims has been amended to overcome the rejection and provide appropriate antecedent basis. The claims should now be clear enough to satisfy the statute. Accordingly, Applicants respectfully request that the rejections of claims 12-18, 23-27, and 30-31 under 35 U.S.C. §112, second paragraph be withdrawn.

The Office Action notes that the claims 3-6, 9-10, and 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have rewritten claims 3, 4, 10, and 21. As a result of these amendments, claims 3-6, 9, 10, 21, and 22 should now be in allowable condition.

The Office Action also indicates that claims 15-18, and 26-27 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph set forth in the Office Action and to include all the limitations of the base claim and intervening claims. Accordingly, Applicants have rewritten claims 15, 16, and 26. As a result, claims 15-18 and 26-27 should now be in allowable condition.

Claims 1, 7, 12, 19, and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gaikwad and Ferreira. Furthermore, claim 29 was rejected under 35 U.S.C. §103(a) as being unpatentable over Betts in view of Ferreira. Applicants respectfully traverse these rejections. The Office Action admits that Gaikwad and Betts do not teach precompensation

means multiplying, before transmission, a vector S = (si), I = 1 to n, by a precompensation matrix such that the matrix product H*M is diagonal, H being a transfer matrix of the plurality of transmission cannels defined by R = H*S, where R= (Ri), I = 1 to n, is the vector of the digital transmission symbols Ri respectively received by the modems. However, the Office Action asserts that Ferreira teaches this feature. The Office Action, in particular, refers to column 5, lines 24-40, column 6, lines 40-67, and column 7, lines 1-30. Applicants respectfully disagree.

After reviewing Ferreira and particularly the sections cited in the Office Action, Applicants can find no teaching, suggestion, or disclosure of the recited feature. Therefore, any rejection based upon such a teaching in Ferreira is inappropriate as Ferreira does not disclose these specifically recited features. If the Examiner believes that Ferreira does disclose this feature, Applicants respectfully request specific explanation of this as Applicants can not discern this teaching from Ferreira.

In addition, Applicants can find no teaching or suggestion in Ferreira or Gaikwad that would lead one skilled in the art trying to solve the problem of far end crosstalk canceling in a DSL transmission system to implement the teaching of Ferreira or Gaikwad so as "to produce adjusted drive signals that result in faster responses of the rolling mill to change the exit coil temperature and interstand tension set point commands as taught by Ferreira" as set forth in the Office Action. Accordingly, Applicants believe that the Office Action has not set forth a legally sufficient prima facie case of obviousness and therefore any rejections based on Gaikwad, Betts, or Ferreira, either alone or in combination, are improper and should be withdrawn.

Accordingly, Applicants believe that claims 1, 2, 7-8, 12-14, 19-20, 23-25, and 29-34 clearly distinguish over the art of record either alone or in combination. Withdrawal of the rejection under 35 U.S.C. §103 is therefore respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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By: _____

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